Soft tissue defects of the body often pose a reconstructive challenge, each with their own set of complicated problems for coverage. When these defects are secondary to significant infections, there is the introduction of unique factors that must be accounted for when successfully managing these wounds. Although this paper thoughtfully reviews the variety of methods used to cover various defects, ranging from skin graft to local flap to distal free microvascular flap, the authors believe that its greater value lies in the discussion regarding evaluation of such infected wounds. Being able to “raise a flap” or transfer tissue to cover the defect is only part of the skillset needed to treat these problems. Appropriate eradication of infection and nonviable tissue, recognition of a stable, viable wound bed, and knowledge to know when it is appropriate to resurface these wounds are the critical pearls for successful coverage. Overlooking the patient’s intrinsic ability (or rather inability) to heal the wound, despite what coverage option is used, will unfortunately lead to complications and potential failure. Recognition of malnutrition and deleterious effects of systemic and/or chronic disease is essential to optimize results of a reconstruction.

The paper begins with an evaluation of wounds secondary to infection utilizing physical examination skills, laboratory testing, and imaging modalities. A discussion about appropriate and effective debridement highlights the need to eradicate devitalized and potentially infected tissues. The authors then discuss the value of antibiotic therapy followed by occasionally overlooked patient-specific factors that can account for poor wound healing such as malnutrition, immunodeficiency, radiation, and liver disease.

The authors’ discussion of negative pressure wound therapy (NPWT) and hyperbaric oxygen therapy are adjuncts to comprehensive care that can aid in augmented healing of wounds. Furthermore, the demonstration of using a surgical glove to acquire a seal for NPWT in an otherwise very challenging area of the hand is a useful pearl that surely will save time and frustration for any unfamiliar reader.

We hope that this overview of the assessment of wounds secondary to infection focusing on their eradication, debridement, and preparation for soft tissue coverage is educational and useful. Moreover, the brief overview of a wide variety of reconstructive options for soft tissue coverage for the upper extremity can help guide readers in addressing any variety of wounds. Whether readers choose to climb the “reconstructive ladder” or reach their appropriate floor with the “reconstructive elevator,” we wish
them the best in effectively and successfully managing the soft tissue coverage of wounds secondary to severe infections.

Conflicts of Interest
The authors declare no conflicts of interest.